INW TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT Docket No. NOV 2 9 2004 (Winder 37 CFR 1.97(b) or 1.97(c)) MSU 4.1-596 In Re Application Of Brage Golding, Connie Bednarski-Meinke and Zhong-ning Dai Application No. Filing Date Examiner Customer No. **Group Art Unit** Confirmation No. 10/634,908 08/05/03 21036 1765 7369 Title: HETEROEPITAXIAL DIAMOND AND DIAMOND NUCLEI PRECURSORS Address to: **Commissioner for Patents** P.O. Box 1450 Alexandria, VA 22313-1450 37 CFR 1.97(b) The Information Disclosure Statement submitted herewith is being filed within three months of the filing of a national application other than a continued prosecution application under 37 CFR 1.53(d); within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; before the mailing of a first Office Action on the merits, or before the mailing of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114. 37 CFR 1.97(c) 2. The Information Disclosure Statement submitted herewith is being filed after the period specified in 37 CFR 1.97(b), provided that the Information Disclosure Statement is filed before the mailing date of a Final Action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an Action that otherwise closes prosecution in the application, and is accompanied by one of: □ the statement specified in 37 CFR 1.97(e); OR

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the fee set forth in 37 CFR 1.17(p).

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MSU 4.1-596
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Brage Golding, Connie Bednarski-Meinke and

Zhong-ning Dai

Serial No.: 10/634,908

Filed: August 5, 2003

For : HETEROEPITAXIAL DIAMOND AND DIAMOND NUCLEI

PRECURSORS

COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

INFORMATION STATEMENT UNDER RULE 1.97 and 1.98

Provided herewith are copies of patents and publications as listed in the attached form PTO-1449. A concise explanation of the relevance of each reference listed in form PTO-1449 is contained in the above-captioned specification as filed.

Applicant respectfully asserts that the substantive provisions of 37 CFR 1.97 and 37 CFR 1.98 are met by the provision of the foregoing statement.

Respectfully,

Ian C. McLeod, Attorney Registration No. 20,931

Date: 11/26/04

McLEOD & MOYNE, P.C. 2190 Commons Parkway Okemos, Michigan 48864

(517) 347-4100

Fax: (517) 347-4103

Substitute for form 1449APTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) NOV 2 9 2004 Complete if Known CAPPLICANT Filling Date First Named Inventor Group Art Unit Examiner Name			gn (+) Inside this. It Reduction Act o	_	/ 🕓	PE (C)	ァ.\	Patent and Tradema	PTC/SB/08A (10-96) roved for use through 10/31/99, OMB 0651-0031 ark Office: U.S. DEPARTMENT OF COMMERCE unless it contains a valid OMB control number.
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	U.S. PATENT DOCUMENTS										
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nitials*	No.1	Number	(Winown)	of Cited Document	MM-DO-YYYY	Passages or Relevant Eliquies Appear					
	AA	5,397,		Stoner, et al	·						
		5,587,		Marchywka et al	<u> </u>	· · · · · · · · · · · · · · · · · · ·					
	AC	5,743,	957	Kobashi et al		·					
	AD	5,863,		Kobashi et al	<u> </u>						
		5,891,		Marchywka et al	<u> </u>	•					
	AF.	5,993,	919	Tsuno et al	<u> </u>						
	AG	6,032,		'Asakawa et al							
	AH	6,063,	187	Lee et al							
	AΙ	6,080,	378	. Yokota et al	<u> </u>						
	ΑJ	6,096,	129	Saito et al							
	AK	6,383,	288	Hayashi et al	<u> </u>						
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	OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS								
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	A1	Ohtsuka, K., et al., Jpn. J. Appl. Phys. 36, 1214 (1997)	T						
	В1	Schreck, M., et al., Appl. Phys. Lett. 74, 650 (1999)							
	C1	Tsubota, T., et al., Diamond and Related Materials 9, 1380 (2000)							
	D1	Hormann, et al., Diamond and Related Materials 9, 256 (2000)							
	E1	Dai, Z., et al., Proc. Mat. Res. Soc., P11.35, 684 (2001)							
	F1	Wolter, S., et al., Appl. Phys. Lett. 62, 1215 (1993)							
,	G1	Jiang, X., Diamond and Related Materials 2, 1112							
·	H1	Wild, C., et al., Diamond and Related Materials 3, 373 (1994)							
	I1 (Ohtsuka, K., et al., Jpn. J. Appl. Phys. Pt. 2, 35 (1996) L1072							
	71 (Ohtsuka, K., et al., Jpn. J. Appl. Phys. Pt. 2, 36 (1997) L1214 Same Al							
F	(1)	Schreck, M., et al., Appl. Phys. Lett. 78, 192 (2001)							
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Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), little of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	7						
	L2	Yugo, S., et al., Appl. Phys. Lett. 58, 1036 (1991)	T						
	М2	Loloee, R., et al., Phil. Mag. A 81, 261 (2001)	-						
	N2	Wolfing, B., et al., J. Phys: Condensed Matter 11, 2669 (1999)	\vdash						
	02	Vargas, R., et al., Appl. Phys. Lett. 65, 1094 (1994)							
	P2	Kronberg, M.L., Acta Metall. 5, 507 (1957)	-						
	Q2	Kuo, K.P., et al., Diamond and Related Materials 6, 1097 (1997)							
	R2	Kulisch, W., et al., Physica Status Solidi A 154, 155 (1996)							
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